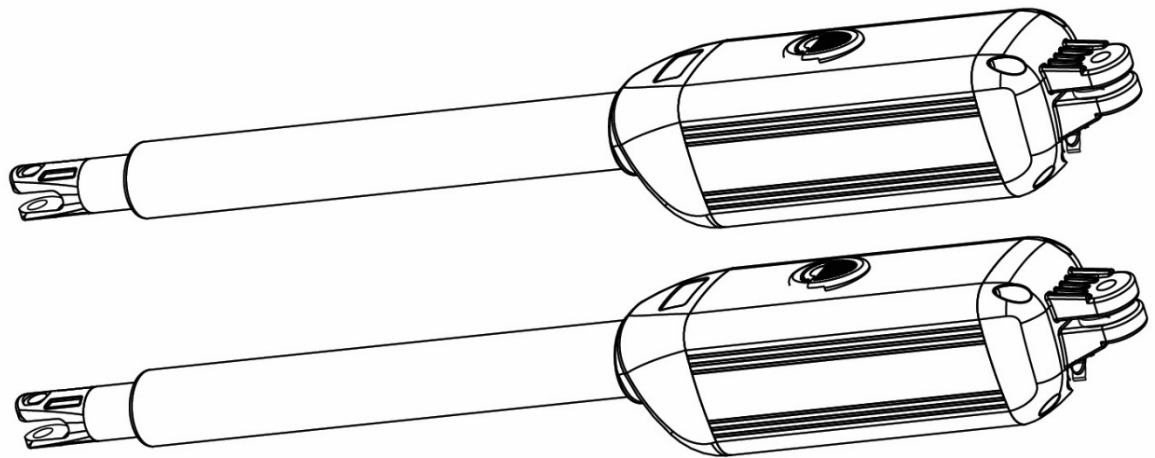
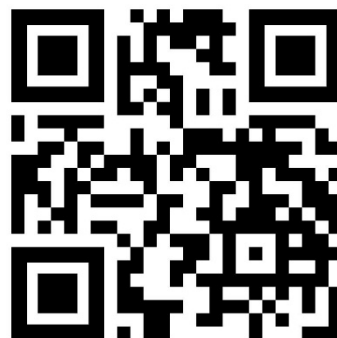


SWING GATE OPENER

iS450 series



Installation Instructions
Scan the QR code for more details



1.1 GENERAL SAFETY PRECAUTION

WARNING:

This user manual is only for qualified technicians who are specialized in installations and automations.

- 1) All installations, electrical connections, adjustments and testing must be performed only after reading and understanding of all instructions carefully.
- 2) Before carrying out any installation or maintenance operation, disconnect the electrical power supply by turning off the mains switch connected upstream and apply the hazard area notice required by applicable regulations.
- 3) Make sure the existing structure is up to standard in terms of strength and stability.
- 4) When necessary, connect the motorized gate to reliable earth system during electricity connection phase.
- 5) Installation requires qualified personnel with mechanical and electrical skills.
- 6) Keep the automatic controls (remote, push buttons, key selectors. etc) placed properly and way from children.
- 7) For replace or repair of motorized system, only original parts must be used. Any damage caused by inadequate parts and methods will be not claimed to motor manufacturer.
- 8) Never operate the drive if you suspect that it might be faulty or will cause damage to the system.
- 9) The motors are exclusively designed for gate opening and closing application, any other usage is deemed inappropriate. The manufacturer will not be liable for any damage resulting from the improper use. Improper usage should void all warranty, and the user accepts sole responsibility for any risks thereby may accrue.
- 10) The system may be operated in proper working order. Always follow the standard procedures by following the instructions in this installation and operating manual.
- 11) Only operate the remote when you have the full view of the gate.

ELSEMA PTY LTD shall not be liable for any injury, damage, or any claim to any person or property which may result from improper use or installation of this system.

Please keep this installation manual for future reference.

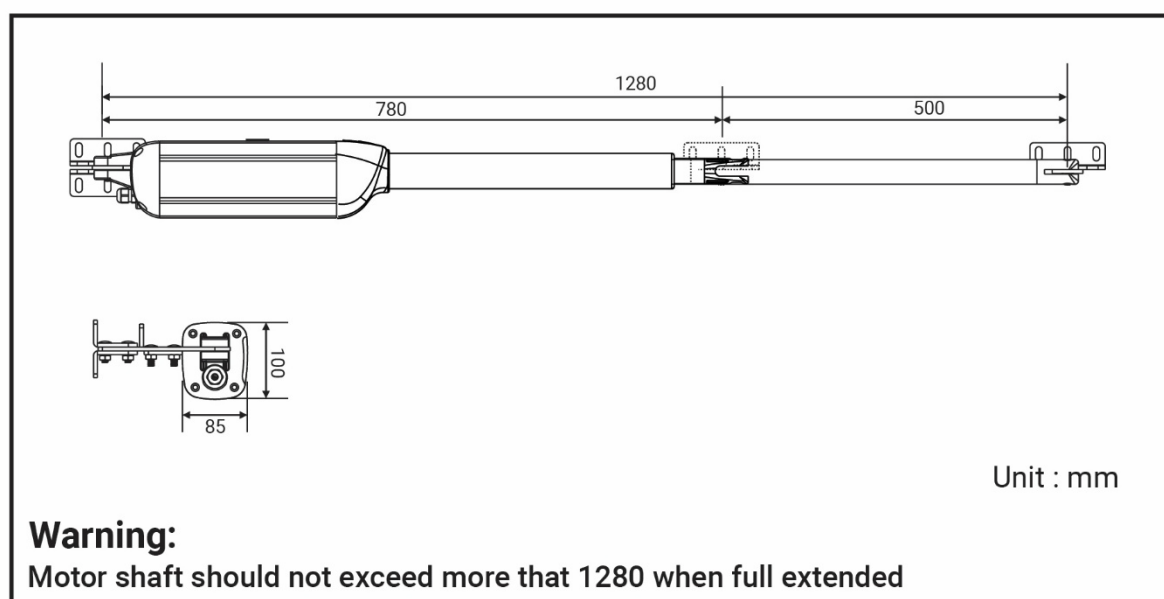
IS450 SERIES

Designed for gate leaves up to 4.5 meters in length, this versatile operator is ideal for single and double gate configurations, Solar kit version is also available. Controlled by Elsema's advanced Eclipse® operating system, it combines intelligent control with a remarkably straightforward setup. Its defining feature is an innovative **series limit switch system** that requires only two wires to run from the motor to the control card, drastically simplifying installation while delivering smart, reliable performance.

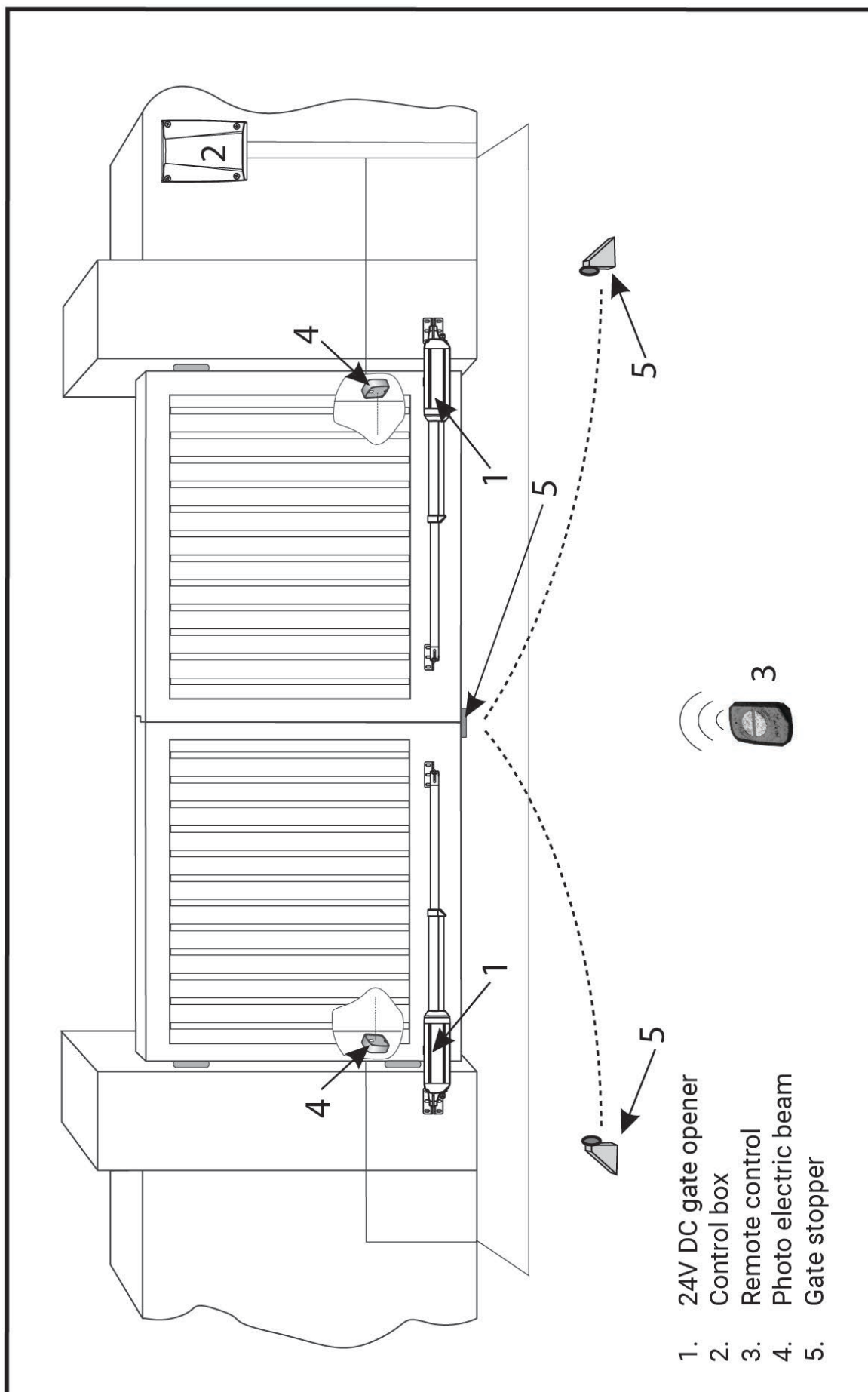
TECHNICAL FEATURES

Motor Voltage	24Volts DC motor
Gear Type	Worm gear
Stroke Length	500mm
Power Supply	240 Volts AC
Nominal Input Current	2 Amps
Maximum Operating Current	5.5 Amps for maximum 10 sec
Maximum Gate Weight	450 kg per leaf
Maximum Gate Length	4.5 metres
Duty Cycle	20%
Operating Temperature	-20°c ~ +50°c
Dimension	1280mm x 100mm x 85mm

DIMENSIONS



STANDARD INSTALLATION

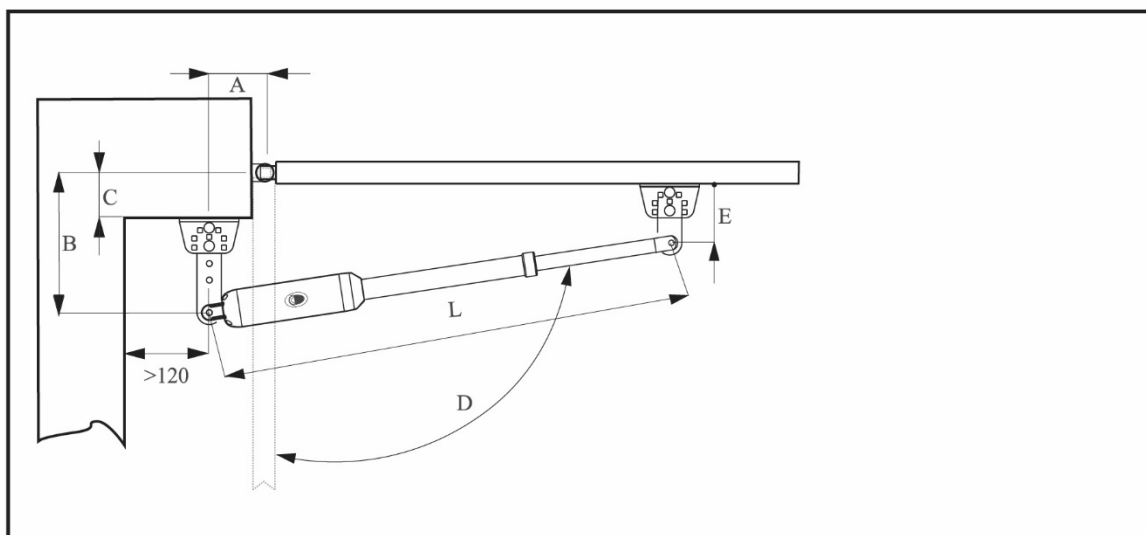


CHECKS BEFORE INSTALLATION

Before proceeding with the installation check the following:

- 1) Check that the motor mounting position on the gate pillar can be done with the measurements below
- 2) Be sure that gate moves freely
- 3) There are no obstacles in the moving gate area
- 4) Hinges are properly positioned and greased
- 5) There should be no friction between the gate leaf
- 6) There should be no friction with the ground while moving the gates
- 7) Check that the gate structure is suitable to install automatic gate motors

C. INSTALLATION DIMENSIONS



A	B	C	D	E	L
150	170	75	90°	98	1280
120	180	85	90°	98	1280
120	200	105	100°	98	1280
160	140	45	100°	98	1280

Dimensions are in **mm**

Maximum value for L should not exceed **1280mm**

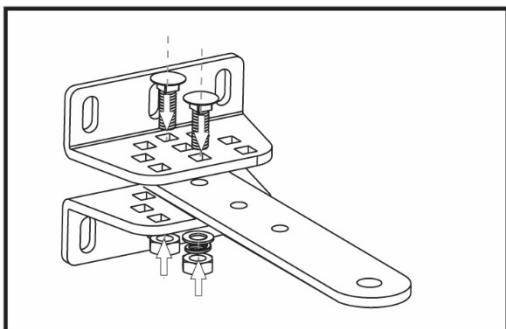
INSTALLATION OF FRONT & REAR BRACKET

Step 1: Before securing the rear bracket to the pillar check if the front bracket can be welded to a solid point on the gate leaf.

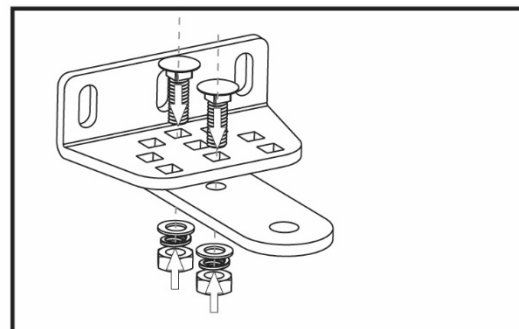
- Fully close the gate.
- Connect the rear and front brackets to the motor.
- Hold the rear bracket onto the pillar with the calculated **A** and **B** values.
- Move the motor in a vertical direction until the fixing zone is in a solid area of the gate leaf for the front bracket.

Step 2: Then fix the front & rear brackets.

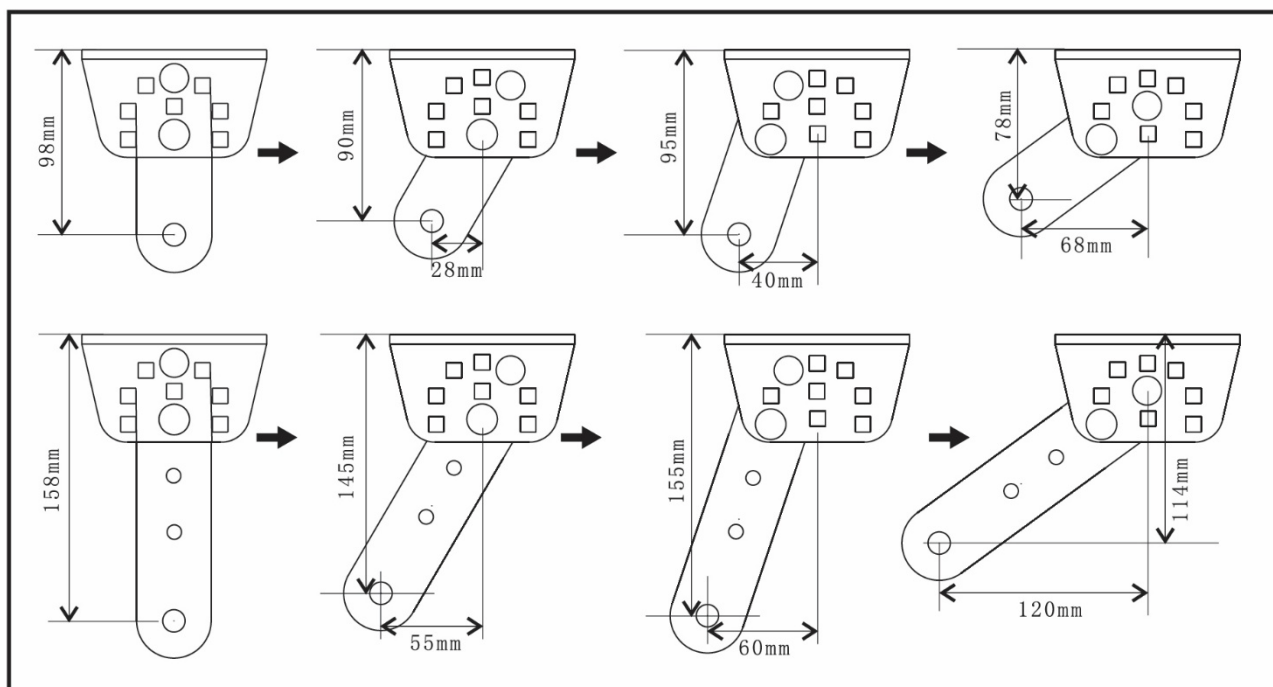
Rear Bracket



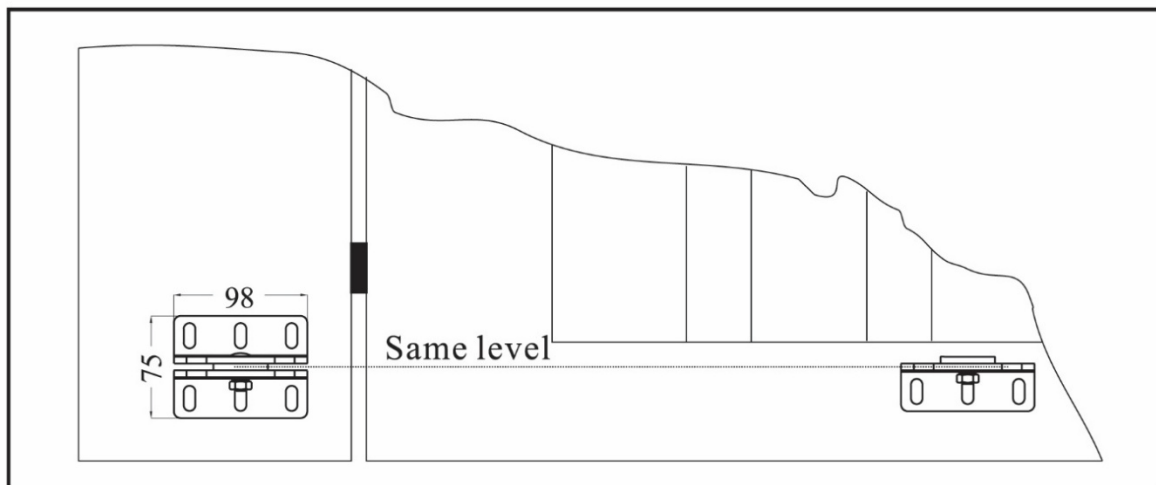
Front Bracket



The Angle of connection can be different



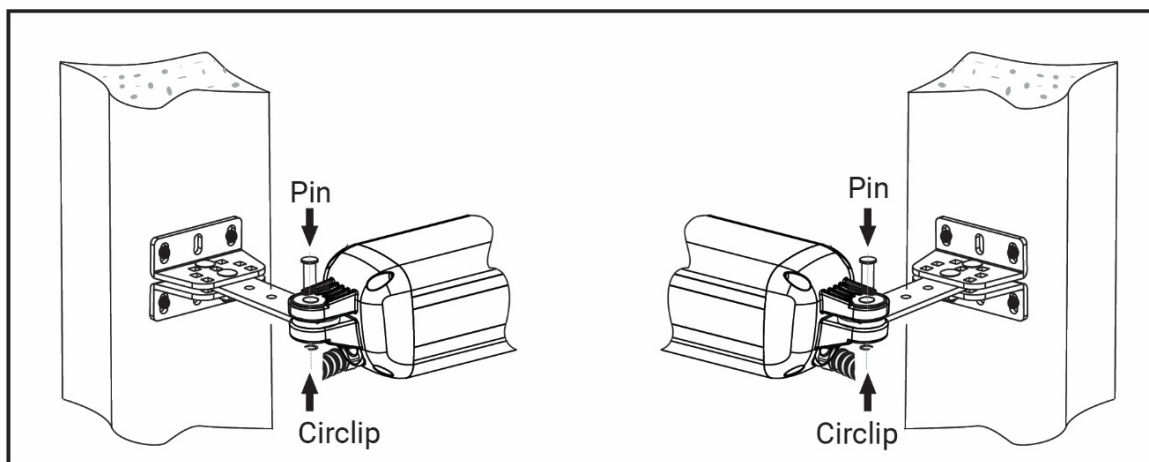
Make sure that the front & rear bracket are on the same level.



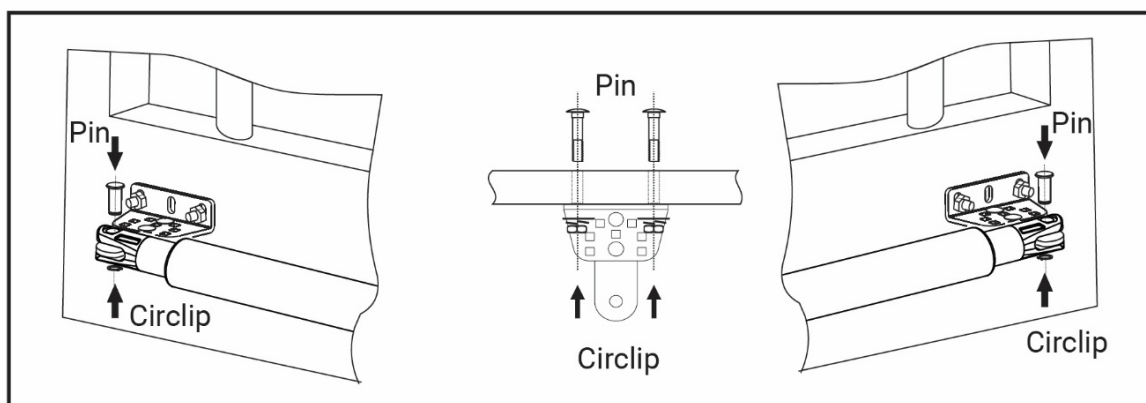
MOUNTING OF THE MOTOR

Mount the motors to the front and rear brackets, securing them with the included pins and circlips.

Rear mounting



Front mounting

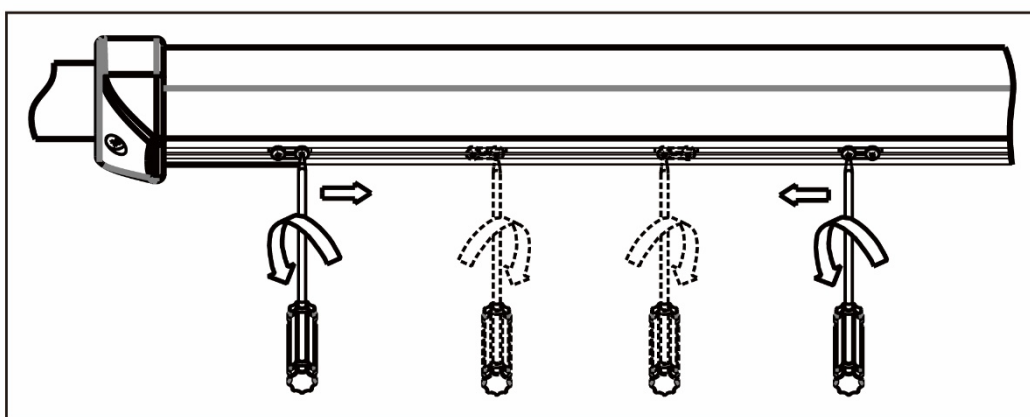


LIMIT SWITCH ADJUSTMENT

The iS450 series motors are equipped with two adjustable limit switches that determines where the gate stops in the opening and closing directions. These positions can be easily customized using a standard screwdriver.

To adjust the gate travel limits:

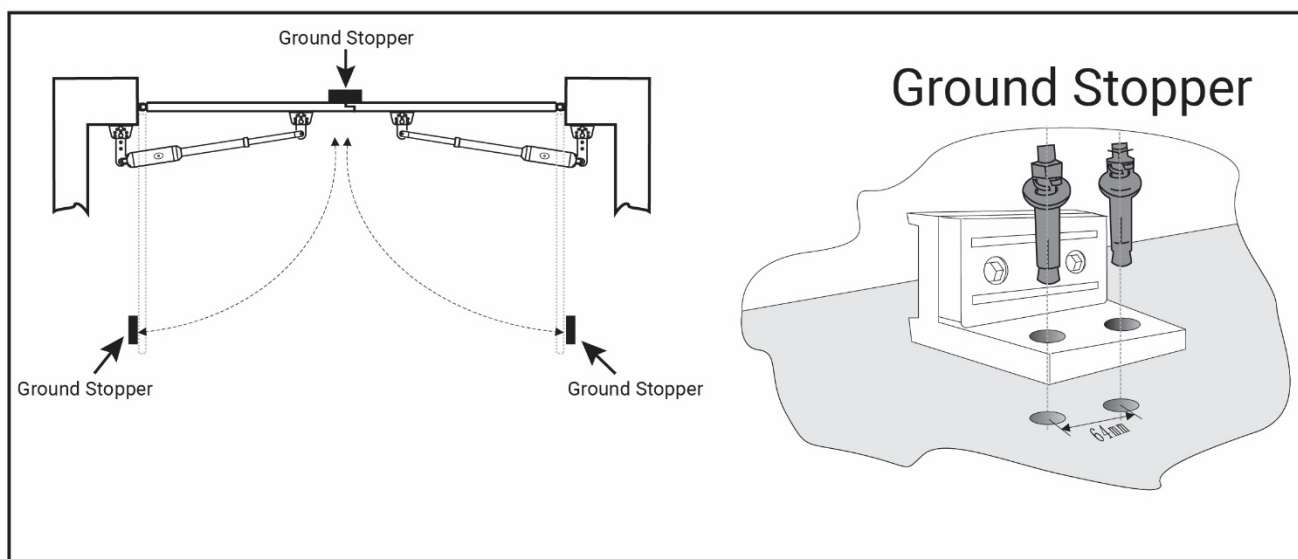
1. **Loosen the switch:** Use a screwdriver to gently loosen the locking screw on the limit switch assembly. Do not remove the screw entirely.
2. **Position the switch:** Slide the limit switch along its tracking slot to your desired position.
3. **Lock in place:** Once the switch is in the correct position, firmly



tighten the screw to secure it.

GROUND STOPPER

It is highly recommended to install ground stoppers to stop the gate in case of limit switch failure.



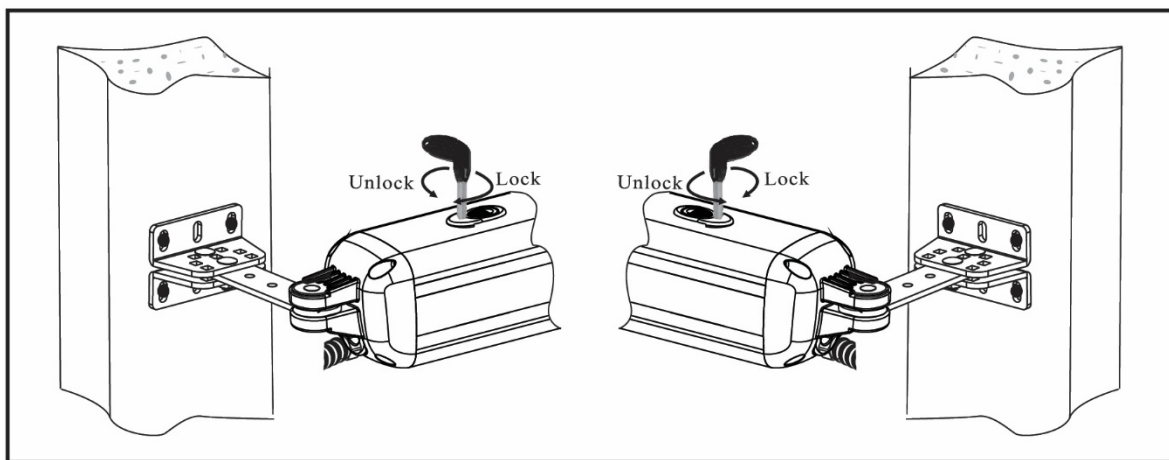
EMERGENCY RELEASE

In the event of a power outage or system failure, you can operate the gate manually by unlocking the motor with the provided override key.

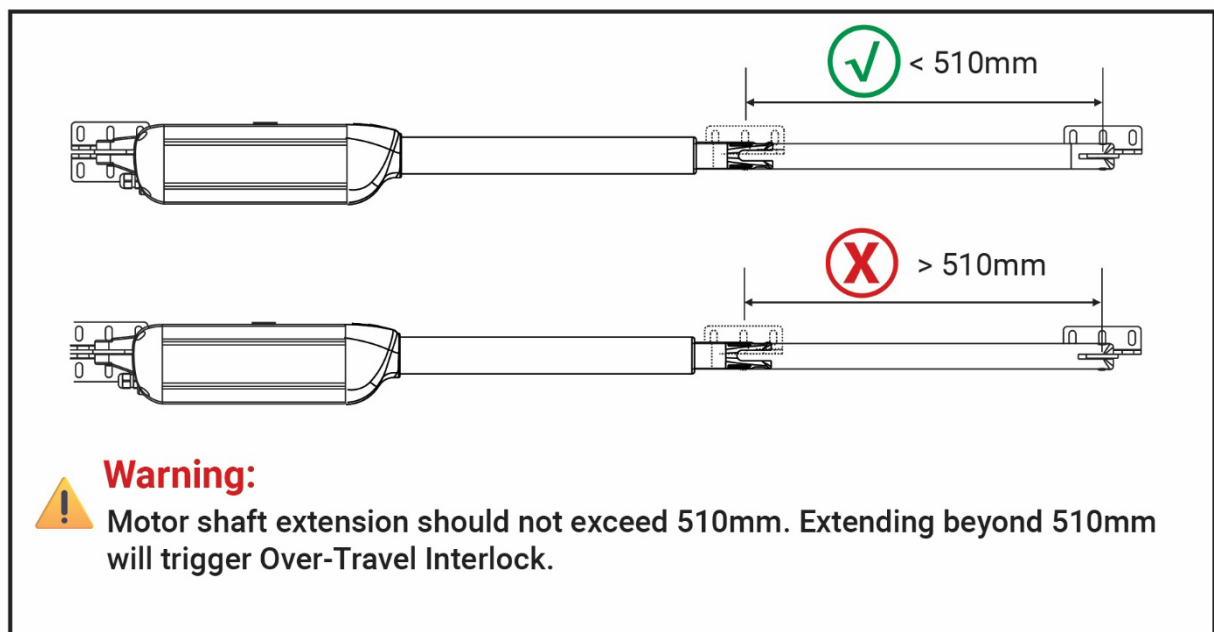
How to Unlock the Motor:

1. Locate the manual release lock on the motor housing.
2. Insert the override key and turn it anticlockwise to disengage.
3. You can now open or close the gate by hand.

Important: *Store the override key in a secure, easily accessible location outside the gate area. Ensuring the key is safe and available guarantees you can always access your property during an emergency.*



OVER-TRAVEL INTERLOCK



ELECTRICAL CONNECTION

After successful motor installation, refer to the user manual of the control card for automatic operation setup. Scan the below QR code for control card instructions.



MAINTENANCE:

Maintenance should be performed at least every six months. If it is used in high traffic area, a more regular maintenance should be performed.

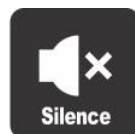
Disconnect the power supply:

- (1) Clean and lubricate the screws, the pins and the hinge with grease.
- (2) Check the fastening points are properly tightened.
- (3) Check and make sure that the wire connections are in good condition.

Connect the power supply:

- (1) Check the power adjustments.
- (2) Check the function of the manual release
- (3) Check the photocells or other safety device.

- **Solar kits**
- **Solar panels**
- **Backup batteries**
- **Photo electric beams**
- **Magnetic locks**
- **Wireless keypads**
- **Pre formed loop**



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